#### **BEFORE**

#### THE PUBLIC SERVICE COMMISSION OF

### SOUTH CAROLINA

DOCKET NO. 2002-2-E - ORDER NO. 2002-347

MAY 1, 2002

IN RE: Annual Review of Base Rates for Fuel Costs of South Carolina Electric & Gas Company.		ORDER APPROVING BASE RATES FOR FUEL COSTS
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On April 24, 2002, the Public Service Commission of South Carolina ("the Commission") held a public hearing on the issue of the recovery of the costs of fuel used in the sale of electricity by South Carolina Electric & Gas Company ("SCE&G" or "the Company") to provide service to its South Carolina retail electric customers. The procedure followed by the Commission is set forth in S.C. Code Ann. §58-27-865 (Supp. 2001). The review of this case is from March 2001 through April 2002.

At the public hearing, Francis P. Mood, Esquire, and B. Craig Collins, Esquire, represented SCE&G; Hana Pokorna-Williamson, Esquire, and Elliott F. Elam, Jr., Esquire, represented the Intervenor, the Consumer Advocate for the State of South Carolina ("the Consumer Advocate"); and F. David Butler, General Counsel, represented the Commission Staff. The record before the Commission consists of the testimony of Jeffrey B. Archie, John R. Hendrix, John W. Flitter, James M. Landreth, and Carl B. Klein on behalf of SCE&G; the testimony of Jacqueline R. Cherry and A. R. Watts on behalf of the Commission Staff; and five (5) hearing exhibits.

Based upon the evidence of the record, the Commission makes the following findings of fact and conclusions of law:

## **FINDINGS OF FACT**

- 1. The record of this proceeding indicates that for the period from March 2001 through February 2002, SCE&G's total fuel costs for its electric operations amounted to \$300,091,457. Hearing Exhibit No. 3, Audit Exhibit E.
- 2. Staff reviewed and compiled a percentage generation mix statistic sheet for SCE&G's fossil, nuclear, and hydroelectric plants for March 2001 through February 2002. The fossil generation ranged from a high of 78% in June 2001, to a low of 64% in October, 2001. The nuclear generation ranged from a high of 31% in April and October 2001 to a low of 17% in June 2001. The percentage of generation by hydro ranged from a high of 5% in June, July, August and October 2001 to a low of 2% in December 2001 and January 2002. Hearing Exhibit No. 5, Utilities Department Exhibit No. 3.
- 3. During the March 2001 through February 2002 period, coal suppliers delivered 6,733,159 tons of coal. The Commission Staff's audit of SCE&G's actual fuel procurement activities demonstrated that the average monthly received cost of coal varied from \$37.82 per ton in March 2001 to \$42.59 per ton in February 2002. Hearing Exhibit No. 3, Audit Department Exhibits A and C.
- 4. Staff collected and reviewed certain generation statistics of SCE&G's major plants for the twelve months ending February 28, 2002. The nuclear fueled Summer Plant had the lowest average fuel cost at 0.46 cents per kilowatt-hour. The

highest amount of generation was 5,433,619 megawatt-hours produced at the Summer Plant. Hearing Exhibit No. 5, Utilities Department Exhibit 4.

- 5. The Commission Staff conducted an extensive review and audit of SCE&G's fuel purchasing practices and procedures for the subject period. Based on its audit, Staff adjusted the cumulative under-recovery as of April 2002 by \$814,753. This adjustment reflects various corrections made by Staff in various Company fuel costs, such as Fossil Fuel Burned Costs, Nuclear Fuel Costs, Purchase and Interchange Power Fuel Costs, and Intersystem Sales. The Company will true-up the cumulative difference of \$814,753, on a per book basis, by the next fuel review period. The Staff's accounting witness, Jacqueline R. Cherry, testified that SCE&G's fuel costs, as adjusted, were supported by the Company's books and records. Testimony of Cherry; Hearing Exhibit No. 3, Audit Department Exhibits.
- 6. The Commission recognizes that the approval of the currently effective methodology for recognition of the Company's fuel costs requires the use of anticipated or projected costs of fuel. The Commission further recognizes the fact inherent in the utilization of a projected average fuel cost for the establishment of the fuel component in the Company's base rates that variations between the actual costs of fuel and projected cost of fuel would occur during the period and would likely exist at the conclusion of the period. S.C. Code Ann. §58-27-865 (Supp. 2001) establishes a procedure whereby the difference between the base rate fuel charges and the actual fuel costs would be accounted for by booking through deferred fuel expenses with a corresponding debit or credit.

7. The record of this proceeding indicates that the comparison of SCE&G's fuel revenues and expenses for the period March 2001 through February 2002 produces an under-recovery of \$40,472,698. Staff added the projected over-recovery of \$2,996,000 for the month of March 2002, and the projected over-recovery of \$1,786,800 for the month of April 2002, to arrive at a cumulative under-recovery of \$35,689,898 as of April 2002<sup>1</sup>. Testimony of Cherry at 3.

These numbers are based on the Commission allowing full recovery of fuel costs, based on the testimony of Staff witness Watts. However, an additional consideration has arisen as the result of Docket No. 2002-1-E, Order No. 2002-235, dated March 29, 2002, which we issued in the Carolina Power & Light Company (CP&L) fuel proceeding. In that Order, we took judicial notice of an Order of the North Carolina Utilities Commission (NCUC), which was issued September 13, 2001, in Docket No. E-2, Sub 784 in which the NCUC approved a fuel charge adjustment for CP&L. In its Order, the NCUC adopted the use of a marketer percentage of 60%. The Marketer Stipulation is a stipulation between the North Carolina Public Staff, the North Carolina Attorney General, CP&L, Duke Power Company, and North Carolina Power regarding the proper methodology for determining the fuel cost associated with power purchases from power marketers and other suppliers. The Stipulation allows a utility to use a certain percentage of the energy cost of the purchase as a proxy for the fuel component of power purchased from a power marketer when the fuel component is not known. NCUC Order, pp. 8-9 (issued September 13, 2001). In its Order the NCUC found 60% to be the appropriate

<sup>&</sup>lt;sup>1</sup> Staff's cumulative under-recovery of \$35,689,898 at April 2002 includes the Staff adjustment of \$814,753 described in Finding of Fact No. 5.

marketer percentage under the Marketer Stipulation. After the hearing in the CP&L case, the Consumer Advocate sent a letter to this Commission's Executive Director, in which the Consumer Advocate requested that the Commission adjust CP&L's allowable recovered fuel cost to allow for recovery of 60% of its purchased power costs where the specific fuel cost is not known. The Consumer Advocate based his request on S.C. Code Ann. Section 58-27-865(A)(Supp. 2001) where "fuel cost" is defined as "the cost of fuel, fuel costs related to purchased power, and the cost of SO2 emission allowances as used and shall be reduced by the net proceeds of any sales of SO2 emission allowances by the utility." Upon presentation of this matter to this Commission for decision, the Staff informed the Commission of the Consumer Advocate's letter and request and, further, informed the Commission that CP&L had verbally agreed to the Consumer Advocate's request. The fuel cost was recalculated, using the 60% proxy as related to fuel costs related to purchased power, and this approach was adopted by us in Order No. 2002-235.

Pursuant to this decision, Staff witness Cherry made a calculation in the present case based on a 63% proxy factor, whereby \$9,237,101 (on a South Carolina retail basis) could be deferred and recorded as a deferred debit and recovered in the Company's next general rate case. Ms. Cherry did not recommend this approach, but merely provided it to this Commission for its consideration as the result of our holding in Order No. 2002-235. We reject the 63% proxy factor in the present case, based on the testimony of Staff witness Watts, as explained <u>infra</u>. We will also disregard Staff late-filed Hearing Exhibit 4 as was requested by the Company and the Consumer Advocate, and we close the record, as also explained <u>infra</u>.

- 8. The Company proposes to set the fuel rate at a level which would permit the under-recovery to continue to be collected over the second year of a two year period.
- 9. Company witness Hendrix originally proposed that the Commission approve a change in the fuel factor to 1.726 cents per kilowatt-hour for the next twelvemonth period. Testimony of Hendrix at 4. However, during the course of the hearing, Hendrix agreed with Staff witness Cherry's adjustment of \$814,753. With this adjustment, the recommended fuel factor becomes 1.722 cents per KWH.
- 10. Applying the Company's recommended fuel factor of 1.722 cents per kilowatt-hour would produce an estimated under-recovery of \$17,298. Testimony of Watts at 3.
- 11. With regard to the nuclear unit, the V.C. Summer nuclear station has operated very well after returning to service on March 3, 2001. Testimony of Watts at 2.
- 12. SCE&G calculated the net capacity factor of its nuclear plant, excluding planned refueling outage activities, planned power reductions, and other reasonable reduced power operations activities, to be 96.2%. Testimony of Archie at 2.

# **CONCLUSIONS OF LAW**

1. Pursuant to S.C. Code Ann., §58-27-865(B)(Supp. 2001), each electrical utility must submit to the Commission its estimates of fuel costs for the next twelve (12) months. Following an investigation of these estimates and after a public hearing, the Commission directs each electrical utility "to place in effect in its base rate an amount designed to recover, during the succeeding twelve months, the fuel costs determined by

the Commission to be appropriate for that period, adjusted for the over-recovery or under-recovery from the preceding twelve-month period." Id.

- 2. <u>S.C. Code Ann.</u>, Section 58-27-865(G) (Supp. 2001) requires the Commission to allow electrical utilities to recover "all their prudently incurred fuel costs... in a manner that tends to assure public confidence and minimize abrupt changes in charges to consumers."
- 3. As stated by the Supreme Court in Hamm v. South Carolina Public Service Commission, 291 S.C. 178, 352 S.E.2d 476, 478 (1987), Section 58-27-865(F) requires the Commission "to evaluate the conduct of the utility in making the decisions which resulted in the higher fuel costs. If the utility has acted unreasonably, and higher fuel costs are incurred as a result, the utility should not be permitted to pass along the higher fuel costs to its consumers." "[T]he rule does not require the utility to show that its conduct was free from human error; rather it must show it took reasonable steps to safeguard against error." Id. at 478, citing Virginia Electric and Power Co. v. The Division of Consumer Council, 220 Va. 930, 265 S.E.2d 697 (1980).
- 4. The Commission recognizes that Section 58-27-865(F) provides it with the authority to consider the electrical utility's reliability of service, its economical generation mix, the generating experience of comparable facilities, and its minimization of the total cost of providing service in determining to disallow the recovery of any fuel costs.
  - 5. Further, S.C. Code Ann. §58-27-865 (F)(Supp. 2001) provides that:

    [T]here shall be a rebuttable presumption that an electrical utility made every reasonable effort to minimize cost

associated with the operation of its nuclear generation facility or system ...if the utility achieved a net capacity factor of ninety-two and one-half percent or higher during the period under review. The calculation of the net capacity factor shall exclude reasonable outage time associated with reasonable refueling, reasonable maintenance, reasonable repair, and reasonable equipment replacement outages; the reasonable reduced power generation experienced by nuclear units as they approach a refueling outage; the reasonable reduced power generation experienced by nuclear units associated with bringing a unit back to full power after an outage; Nuclear Regulatory Commission required testing outages unless due to the unreasonable acts of the utility; outages found by the [C]ommission not to be within the reasonable control of the utility; and acts of God. The calculation also shall exclude reasonable reduced power operations resulting from the demand for electricity being less than the full power output of the utility's nuclear generation system. If the net capacity factor is below ninety-two and one-half percent after reflecting the above specified outage time, then the utility shall have the burden of demonstrating the reasonableness of its nuclear operations during the period under review.

6. Upon consideration of the evidence of record, the Commission concludes that SCE&G's generating facilities were operated efficiently during the period under review and that the corresponding fuel costs were prudently incurred. This conclusion is based upon the opinion and report of the Staff which indicated that there were no unreasonable Company actions which caused SCE&G's customers to incur higher fuel costs. This conclusion is further supported by the evidence presented by SCE&G that the nuclear unit achieved a net capacity factor of 96.2%. Additionally, SCE&G's steam fossil units achieved an availability of 77.27%. By comparison, the NERC five year average of availability of similar sized units from 1996-2000 is 86.81%. Availability was lower than the national average, due to the timing and duration of the normal planned and

maintenance outages and the preparation for the new combined cycle units at Urquhart Station. Testimony of Landreth at 4.

7. We reject the 63% proxy option, as calculated by Staff witness Cherry. Although he agrees that our use of a proxy is reasonable, Staff witness Watts notes that the genesis of the 63% option, the 60% option from North Carolina, is problematic in several respects, which leads him to conclude that the 63% proxy figure has weaknesses as applied in the present case as well. First, he states that a proxy originating in another state may not be appropriate in South Carolina. Watts noted that utilities have different operations, generation mix, and power requirements, which may show that one proxy is not necessarily appropriate for every situation. Watts further testified that the current use of the generic 60% fuel proxy in North Carolina was based on a range of fuel cost to total energy cost for off-system sales for the utility companies in that State, included offsystem sales for North Carolina Power, and was based on data from some period prior to August of 2001. The North Carolina generic factor is also variable, and prior to the current 60% level, the factor had been set at 70%. Accordingly, Watts concludes that this factor and the proxy methodology behind it have many weaknesses, and the factor and methodology should not be applied in this case.

Watts also points to various language in Section 58-27-865 that provides insight in applying the fuel statute in specific instances. Besides the definition of "fuel cost," one area addresses the offsetting of cost of fuel recovered through sales of power to neighboring utilities against fuel costs to be recovered. See Section 58-27-865(E)(Supp. 2001). Another area (Section F) spells out the rebuttable presumption of prudence in

operation by a utility of its nuclear generation facilities with the attaining of a certain level of production during the review period. Under this Section, costs can be disallowed. Section F, according to Watts, clearly shows that the aim of the statute is to encourage the affected utility to operate its production system, including the purchase power option, in the most effective and efficient manner. This is in full concert with the provision of electric service at the most reasonable and prudent rate, through minimization of the total cost of providing service.

Watts stated that consistent with this approach is the method that the Commission Staff has been applying through the use of a utility specific avoidable fuel cost proxy for purchase power, where no specific fuel component was identified. This is also similar to the way that the utility determines the most economical operation of its system by comparing the cost of its next available unit to the cost of purchasing the power required from another provider. A significant component of these comparisons is the cost of fuel to generate the power from the utility's own plant. Watts believes that the objective should be to establish a proxy that most appropriately satisfies these operating criteria. The method of using the utility's avoided cost as a proxy for the fuel portion of the purchase power cost has been used for many years in determining the rate that a utility pays for power under certain contracts. These contracts are those between the utilities and Qualifying Facilities under the Public Utility Regulatory Policies Act of 1978. This Commission has approved rates based on this methodology, which is required under PURPA. Watts finally opined that continuation of the prior proxy methodology which the

Commission Staff has been using, i.e. avoided cost, is the most appropriate and prudent, and is also consistent with the South Carolina fuel statute.

Staff witness Watts' conclusion with regard to the use of the avoided cost proxy is supported by Company witness Carl B. Klein. Klein stated that the avoidable cost in dollars per megawatt-hour is the standard energy pricing measure. Klein notes that SCE&G's marketers generally have no information about the fuel cost of any power offered for their purchase. Further, power marketers for other utilities or other wholesale power market participants may or may not have information about the fuel cost of any power that they offer, but if they have such information, they are likely to consider it proprietary and confidential information. Moreover, marketers often will not know the fuel cost of power they offer.

Klein further testified that about five years ago, SCE&G made direct requests for fuel information on invoices from its counterparts. Some utilities were willing to provide fuel information, but other utilities and all independent power marketers replied that they were either unable or unwilling to provide this information. SCE&G concluded at the time that such information was generally not going to be forthcoming and that, even if it were to be provided, its accuracy could not be relied upon. Consequently, taking guidance from an obligation to minimize "the total cost of providing service", "SCE&G along with the other jurisdictional utilities proposed to the Commission Staff that "fuel costs related to purchased power" be determined by comparing the cost to acquire and receive any potential purchase of power to serve its retail customers with the cost to produce that power. See S.C. Code Ann. Section 58-27-865 (Supp. 2001). SCE&G

undertook to determine and record the avoided cost for every purchase made and to maintain those records for audit and verification. Klein notes that since that time, Staff auditors have reviewed all the monthly summarized data and the hourly entries for many days and months during the audit processes associated with every fuel review, and have recommended recovery for all costs for purchased power which were found to be less than the production costs avoided by the purchases. The Commission has accepted these costs for recovery.

Finally, Klein expressed doubts about the use of the 60% proxy factor stipulated to by CP&L, for use in SCE&G's case. SCE&G believes that the controls in its purchasing and accounting processes assure that its submitted purchased power costs save its ratepayers from even higher costs, and so it is at least as reasonable to propose recovery of those expenses. SCE&G expresses a belief that these expenses are "fuel costs related to purchased power" vis-à-vis the Company's "cost of fuel" for generation and thus an appropriate avoidable fuel cost proxy, as described by Staff witness Watts.

We agree with the reasoning of Staff witness Watts and Company witness Klein. We think the avoidable fuel cost proxy is much more reasonable and appropriate in the case of SCE&G than a 60% proxy or the 63% proxy proposed as an alternative, when, in fact, the precise amount of "fuel costs related to purchased power" cannot be determined. "Avoidable cost" is a standard energy pricing measure, used for many years to determine the rate that a utility pays for power. The avoidable cost proxy contributes to the Company's effort to minimize the total cost of providing service by encouraging the purchase of power at an amount less than that seen if the Company had to produce the

power. The 60% factor was the result of a study done in North Carolina for CP&L, and the same factors may not be applicable to SCE&G. We would also note that Staff witness Cherry's 63% figure was developed on the basis of power purchases, rather than on offsystem sales, which was the basis of the 60% proxy from the North Carolina Commission. Thus, the bases for the 60% and 63% proxys are very different.

It is well established by the testimony and evidence of the record that the issue is which is the most appropriate and reasonable proxy to use for purchased power expenses when the corresponding fuel cost is not identified. The statute clearly intends for inclusion of fuel costs related to purchased power as well as consideration of economical generation mix, and minimization of the total cost of providing service. The proposed avoided cost proxy is the most appropriate, and it is consistent with the requirements of the statute. This methodology most closely simulates the efficient operations of the Company's generating facilities by allowing for recovery of prudently incurred fuel costs at a level equivalent to the Company's avoided costs, and likewise disallowing purchased power costs is excess of this level. This proxy methodology does not violate the fuel statute simply because it is more appropriate than a 63% proxy factor. Both are merely substitutes or stand-ins for an unidentified quantity.

Finally, during the hearing, one of our Commissioners requested that the Staff prepare a late-filed exhibit to consist of a statistical ANOVA analysis comparing fuel ratios of power purchases made by SCE&G to sales made by SCE&G. This was denominated as Hearing Exhibit 4. Subsequent to the hearing, both the Company and the Consumer Advocate submitted letters asking that the exhibit be disregarded. SCE&G

stated that the analysis did not provide any meaningful evidence of an appropriate proxy to be used for determining fuel costs related to purchased power. The Consumer Advocate did not express an opinion on whether the exhibit provided any meaningful evidence of an appropriate proxy, but he did state that this Commission already has before it enough evidence to choose between a 63% factor and the proxy proposed by Staff witness Watts.

We agree with the Consumer Advocate that we already have enough evidence before us to choose between the two proxys. Accordingly, we will disregard the late-filed exhibit and close the record in this matter. For the reasons stated above, we adopt the avoided cost proxy.

8. After considering the directives of §58-27-865 (B) and (F) which require the Commission to place in effect a base fuel cost which allows the Company to recover its fuel costs for the next twelve months adjusted for the over-recovery or under-recovery from the preceding twelve month period, the Commission has determined that the appropriate base fuel factor for May 2002 through April 2003 is 1.722 cents per kilowatt-hour. The Commission finds that a 1.722 cents per kilowatt-hour fuel component will allow SCE&G to recover its projected fuel costs and, at the same time, prevent abrupt changes in charges to SCE&G's customers. Staff shall monitor the cumulative recovery account to assure a proper level of reasonableness. We approve the Staff's adjustments.

## IT IS THEREFORE ORDERED THAT:

1. The base fuel factor for the period May 2002 through April 2003 is set at 1.722 cents per kilowatt-hour.

2. SCE&G shall file an original and ten (10) copies of the South Carolina Retail Tariffs within ten (10) days of receipt of this Order.

3. SCE&G shall comply with the notice requirements set forth in S.C. Code Ann., §58-27-865 (B) (Supp. 2001).

4. SCE&G shall continue to file the monthly reports as previously required.

5. SCE&G shall account monthly to the Commission for the differences between the recovery of fuel costs through base rates and the actual fuel costs experienced by booking the difference to unbilled revenues with a corresponding deferred debit or credit. Staff shall monitor the cumulative recovery account.

6. SCE&G shall submit monthly reports to the Commission of fuel costs and scheduled and unscheduled outages of generating units with a capacity of 100 MW or greater.

7. This Order shall remain in full force and effect until further order of the Commission.

BY ORDER OF THE COMMISSION:

William Man 2

ATTEST:

Executive Director

(SEAL)